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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,906	01/25/2006	Shigeo Akamatsu	00331054PUS1	7360
2292 7590 03/18/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER HOM, SHICK C				
ART UNIT		PAPER NUMBER		
2416				
NOTIFICATION DATE		DELIVERY MODE		
03/18/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

# Office Action Summary

**Application No.**

10/565,906

**Applicant(s)**

AKAMATSU ET AL.

**Examiner**

SHICK C. HOM

**Art Unit**

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 9 and 11-13 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Drawings***

1. Figures 17-21 should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aiello et al. (7,031,294) in view of Aiello et al. (6,952,456).

Regarding claims 11-12:

Aiello et al. in U.S. Patent 7,031,294 disclose the jitter correction apparatus, col. 1 lines 51-56 recite device with jitter correction, comprising: a reception unit receiving data in synchronization with another apparatus based on a beacon (col. 12 lines 6-27 recite the use of a beacon); and an output unit outputting a signal used by said reception unit for receiving said data in synchronization with said another apparatus, from said reception unit to said access control unit, wherein a synchronization unit using said signal to synchronize a clock frequency generation function of said reception unit with a clock frequency generation function of said access control unit (col. 5 lines 24-52 recite the clock master function in the master device, i.e. the other apparatus, maintaining a "master clock" and issuing a "master sync code," i.e. signal used by the reception unit, a unique bit pattern which identifies the sender as the clock master, whereby the clock recovery function in the slave device, i.e. reception unit, recovering clock information from the incoming data stream and synchronizing the slave device to the master device thereby synchronizing its local clock to that of the master clock, clearly reads on the synchronization unit and the output unit for outputting a signal used by the reception unit as claimed).

For claims 11-12, Aiello et al. in U.S. Patent 7,031,294 disclose all the subject matter of the claimed invention with the exception of a definition unit defining transmission and reception of data in said reception unit; and an access control unit outputting said data according to said definition unit.

Aiello et al. in U.S. Patent 6,952,456 from the same or similar fields of endeavor teach that it is known to provide a definition unit defining transmission and reception of data in said reception unit; and an access control unit outputting said data according to said definition unit (col. 6 line 1-55 recite the framing control unit providing frame definition and transmission being carried out by the Medium Access Control protocol using a TDMA frame definition clearly anticipate the definition unit and access control unit as claimed).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the definition unit defining transmission and reception of data in said reception unit; the access control unit outputting said data according to said definition unit as taught by Aiello et al. in U.S. Patent 6,952,456 in the communications network of Aiello et al. U.S. Patent 7,031,294.

The definition unit defining transmission and reception of data in said reception unit; and the access control unit

outputting said data according to said definition unit can be implemented by connecting the definition unit and access control unit of Aiello et al. U.S. Patent 6,952,456 into the communication system of Aiello et al. U.S. Patent 7,031,294. The motivation for connection the definition unit and access control unit of Aiello et al. U.S. Patent 6,952,456 into the communication system of Aiello et al. U.S. Patent 7,031,294 being that it provides the desirable added feature of being able to define transmission and reception of data in said reception unit and being able to provide the transmitter for transmitting data in form of ultra-short spread spectrum pulses and providing the desirable feature of Ultra-Wide-Band wireless communication.

5. Claims 1, 9, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aiello et al. (7,031,294) and Aiello et al. (6,952,456) in view of what is disclosed as prior art in Figs. 17-21 and page 1 line 14 to page 6 line 13 of the applicant's specification.

For claims 1, 9, and 13, Aiello et al. (7,031,294) and Aiello et al. (6,952,456) disclose the jitter correction apparatus described in paragraph 4 of this office action.

Further, Aiello et al. (7,031,294) disclose whereby said beacon detection signal being given higher priority over transmission data (col. 1 lines 56-61 recite the use of priority) as in claims 1 and 13.

Aiello et al. (7,031,294) and Aiello et al. (6,952,456) disclose all the subject matter of the claimed invention with the exception of the output unit being in a MAC (Medium Access Control) layer; the interface between said MAC layer and a LINK layer to said LINK layer for outputting transmission data; and the beacon detection signal being from said MAC layer to said LINK layer as in claims 1, 9, and 13.

That which is disclosed as prior art by the applicant teaches that it is known to provide whereby the output unit being in a MAC (Medium Access Control) layer; the interface between said MAC layer and a LINK layer to said LINK layer for outputting transmission data; and the beacon detection signal being from said MAC layer to said LINK layer (Fig. 17 of the specification shows the MAC-SAP, the FSC-SAP, and PHY-SAP interfaces as in claims 1, 9, and 13).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide whereby the output unit being in a MAC (Medium Access Control) layer; the interface between said MAC layer and a LINK



layer to said LINK layer for outputting transmission data; and the beacon detection signal being from said MAC layer to said LINK layer as taught by the prior art of the applicant in the jitter correction apparatus Aiello et al. (7,031,294) and Aiello et al. (6,952,456). The output unit being in a MAC (Medium Access Control) layer; the interface between said MAC layer and a LINK layer to said LINK layer for outputting transmission data; and the beacon detection signal being from said MAC layer to said LINK layer can be implemented by using the MAC (Medium Access Control) layer; providing the interface between said MAC layer and a LINK layer to said LINK layer for outputting transmission data; and the beacon detection signal being from said MAC layer to said LINK layer of the prior art in the design of the apparatus of Aiello et al. (7,031,294) and Aiello et al. (6,952,456). The motivation for using the MAC (Medium Access Control) layer; providing the interface between said MAC layer and a LINK layer to said LINK layer for outputting transmission data; and the beacon detection signal being from said MAC layer to said LINK layer as taught by the self-disclosed prior art in the apparatus of Aiello et al. (7,031,294) and Aiello et al. (6,952,456) being that it provides more efficiency for the design of the system since the system uses standard OSI

reference model for interfacing the components of the transmitter and receiver.

***Allowable Subject Matter***

6. Claims 2-5 and 10 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cloutier discloses an apparatus and method for correcting jitter in data packets. Loukianov et al. disclose program clock synchronization in multimedia networks. Santhoff et al. disclose sampling circuit apparatus and method.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHICK C. HOM whose telephone number is (571)272-3173. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pham Chi can be reached

on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chi H Pham/  
Supervisory Patent  
Examiner, Art Unit 2416  
3/13/09

SH